

Appln No. 10/045,184  
Amdt date August 18, 2004  
Reply to Office action of May 20, 2004

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

Claim 1. (Currently Amended) A two-component dental bleaching system wherein the components are adapted to be admixed and applied to the teeth from a dental tray for sustained contact, said system comprising:

as a first component, a dental peroxide gel comprising both carbamide peroxide and hydrogen peroxide; and

as a second component, an orally compatible activator gel wherein said activator gel includes a base ~~to increase its pH~~.

Claim 2. (Original) The dental bleaching system according to claim 1, wherein the first component includes hydroxypropyl cellulose.

Claim 3. (Original) The dental bleaching system according to claim 1, wherein the first component comprises carbamide peroxide at a weight percentage of at least about 10%, based on the total weight of said first component.

Claim 4. (Original) The dental bleaching system according to claim 1, wherein the first component comprises hydrogen peroxide at a weight percentage of at least about 0.5%, based on the total weight of the first component.

Claim 5. (Original) The dental bleaching system according to claim 1, wherein the first component comprises hydrogen peroxide

**Appln No. 10/045,184**  
**Amdt date August 18, 2004**  
**Reply to Office action of May 20, 2004**

at a weight percentage of at least about 5%, based on the total weight of the first component.

Claim 6. (Original) The dental bleaching system according to claim 1, wherein the first component comprises carbamide peroxide at a weight percentage of at least about 16% and hydrogen peroxide at a weight percentage of at least about 1.5%, based on the total weight of the first component.

Claim 7. (Original) The dental bleaching system according to claim 1, wherein the first component comprises carbamide peroxide at a weight percentage from about 10% to about 25% and hydrogen peroxide at a weight percentage from about 0.5% to about 10%, based on the total weight of the first component.

Claim 8. (Original) The dental bleaching system according to claim 1, wherein the first component comprises carbamide peroxide at about 16% by weight and hydrogen peroxide at about 1.3% by weight, based on the total weight of the first component.

Claim 9. (Original) The dental bleaching system according to claim 1, wherein the first component comprises carbamide peroxide at about 16% by weight and hydrogen peroxide at about 6% by weight, based on the total weight of the composition.

Claim 10. (Original) The dental bleaching system according to claim 1, wherein the first component comprises carbamide peroxide at a weight percentage of about 16% and hydrogen peroxide at a weight percentage of about 10%, based on the total weight of the composition.

Appln No. 10/045,184

Amdt date August 18, 2004

Reply to Office action of May 20, 2004

Claim 11. (Original) The dental bleaching system according to claim 1, wherein the activator gel additionally comprises sodium fluoride and potassium nitrate.

Claim 12. (Original) The dental bleaching system according to claim 1, wherein the activator gel additionally comprises potassium nitrate and tetrapotassium pyrophosphate.

Claim 13. (Currently Amended) ~~The dental bleaching system according to claim 1 wherein the activator gel comprises:~~

A two-component dental bleaching system wherein the components are adapted to be admixed and applied to the teeth for sustained contact, said system comprising:

a first component comprising both carbamide peroxide and hydrogen peroxide; and

a second component comprising a compatible activator gel wherein said activator gel includes a base to increase its pH, and a component selected from the group consisting of:

Propylene Glycol	33.000	49.97%	by wt.
hydroxypropyl cellulose	1.980%		by wt.
<del>Propylene Glycol</del>	<del>16.970%</del>		
Glycerin	38.100%		by wt.
Peppermint Flavor	0.200%		by wt.
Natural Peppermint	0.400%		by wt.
Oil			
DI Water	0.500%		by wt.
Sodium Fluoride	0.350%		by wt.
Fumed Silica	8.200%		by wt.;

<u>Propylene Glycol</u>	<u>45.576%</u>	<u>by wt.</u>
<u>Hydroxypropyl Cellulose</u>	<u>1.980%</u>	<u>by wt.</u>
<u>Glycerin</u>	<u>40.000%</u>	<u>by wt.</u>

Appln No. 10/045,184

Amdt date August 18, 2004

Reply to Office action of May 20, 2004

<u>Peppermint Flavor</u>	<u>0.200%</u>	<u>by wt.</u>
<u>Natural Peppermint</u>	<u>0.400%</u>	<u>by wt.</u>
<u>Oil</u>		
<u>Fumed Silica</u>	<u>11.000%</u>	<u>by wt.</u>
<u>DI Water</u>	<u>0.544%</u>	<u>by wt.;</u>

<u>Propylene Glycol</u>	<u>40.767 %</u>	<u>by wt.</u>
<u>Hydroxypropyl Cellulose</u>	<u>1.980%</u>	<u>by wt.</u>
<u>Glycerin</u>	<u>32.753%</u>	<u>by wt.</u>
<u>Artificial Cherry Flavor</u>	<u>0.600%</u>	<u>by wt.</u>
<u>Fumed Silica</u>	<u>5.600%</u>	<u>by wt.</u>
<u>Potassium Nitrate</u>	<u>5.400%</u>	<u>by wt.</u>
<u>DI Water</u>	<u>12.600%</u>	<u>by wt.;</u>

<u>Propylene Glycol</u>	<u>40.767%</u>	<u>by wt.</u>
<u>Hydroxypropyl Cellulose</u>	<u>1.980%</u>	<u>by wt.</u>
<u>Glycerin</u>	<u>32.753%</u>	<u>by wt.</u>
<u>Peppermint</u>	<u>0.200%</u>	<u>by wt.</u>
<u>Natural Peppermint</u>	<u>0.400%</u>	<u>by wt.</u>
<u>Oil</u>		
<u>Fumed Silica</u>	<u>5.600%</u>	<u>by wt.</u>
<u>Potassium Nitrate</u>	<u>5.400%</u>	<u>by wt.</u>
<u>DI Water</u>	<u>12.600%</u>	<u>by wt.;</u>

and mixtures thereof.

Claim 14-16 (Canceled)

Claim 17. (New) A two-component, increased peroxide content dental bleaching system adapted to be admixed and applied to the teeth for sustained contact, said system comprising:

a first component comprising a mixture of carbamide peroxide and hydrogen peroxide, and

**Appln No. 10/045,184**  
**Amdt date August 18, 2004**  
**Reply to Office action of May 20, 2004**

a second component comprising an orally compatible activator gel comprising at least one base, at least one gelling agent, at least one aliphatic polyol, and at least one flavoring agent.

Claim 18. (New) The two-component bleaching system of claim 17 wherein said at least one gelling agent is selected from a group consisting of cellulosic gums, silica, emulsifying waxes and mixtures thereof.

Claim 19. (New) The two-component bleaching system of claim 17 wherein said at least one aliphatic polyol is selected from the group consisting of glycerine, propylene glycol and mixtures thereof.

Claim 20. (New) The two-component bleaching system of claim 17 wherein said at least one flavoring agent is selected from the group consisting of taste, flavor enhancement agents and mixtures thereof.

Claim 21. (New) The two-component bleaching system of claim 18 wherein said gelling agent comprises hydroxypropyl cellulose.

Claim 22. (New) The two-component bleaching system of claim 17 wherein said hydrogen peroxide is present in an amount of from about 1% to about 20% by weight of the first component.

Claim 23. (New) The two-component bleaching system of claim 17 wherein said carbamide peroxide is present in an amount of from about 10% to about 20% by weight of the first component.

**Appln No. 10/045,184**

**Amdt date August 18, 2004**

**Reply to Office action of May 20, 2004**

Claim 24. (New) The two-component dental bleaching system wherein the components are adapted to be admixed and applied to the teeth for sustained contact, said system comprising:

a first component comprising both carbamide peroxide and hydrogen peroxide; and

a second component comprising a compatible activator gel comprising propylene glycol, hydroxypropyl cellulose, glycerin, DI water, sodium fluoride, and fumed silica.

Claim 25. (New) The two-component dental bleaching system of claim 24 wherein said propylene glycol is present in an amount of from about 40% by wt. to about 50% by wt. compared to the total weight of the second component.

Claim 26. (New) The two-component dental beaching system of claim 24 wherein said glycerin is present in an amount from about 32% by wt. to about 40% by wt. compared to the total weight of the second component.

Claim 27. (New) A two-component dental bleaching system of claim 24 wherein the fumed silica is present in an amount of from about 5.6% by wt. to about 11% by wt. compared to the total weight of the second component.